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CERTIFICATE OF MAILING BY FIRST CLASS MAIL (37 CFR 1.8)  Applicant(s): Douglas R. Hackler, Sr. et al.			Docket No. 51889/5	
, pphoenics, sought in the later of the late			31687/3	
Application No.	Filing Date	Examiner	Customer No.	Group Art Unit
10/664,666	September 18, 2003	Eric W Thomas	32642	4619
Invention: MIM MULTILAYER CAPACITOR  JUN 2 1 2004				
,		& TRADEMA		
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I hereby certify that this Response to Restriction Requirement (3 pgs.); postcard  (Identify type of correspondence)				
is being deposited with the United States Postal Service as first class mail in an envelope addressed to:				
Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on June 16, 2004 (Date)				
John R. Thompson				
(Typed or Printed Name of Person Mailing Correspondence)  A Range				
(Signature of Person Milling Cortespondence)				
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## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Douglas R. Hackler Sr., et al.

Confirmation No. 4619

Application No. 10/664,666

Filed: September 18, 2003

For: MIM MULTILAYER CAPACITOR

Group Art Unit: 2831

Examiner: Eric W. Thomas

Date: June 16, 2004

## RESPONSE TO RESTRICTION REQUIREMENT

## TO THE COMMISSIONER FOR PATENTS:

Applicant responds as follows to the May 24, 2004, Office Action requiring an election of species.

Claims 1-54 are in the application. Claims 1, 13, 26, 39, and 53 are in independent form. The claims stand subject to restriction under 35 USC § 121. The Examiner states that restriction to one of the following species of claims is required:

- I. Claims 1-12, 26-38; and
- II. Claims 13-25 and 39-54.

Applicant provisionally elects, with traverse, to prosecute claims 1-12 and 26-38.

Applicant respectfully traverses the Examiner's restriction requirement for the reasons discussed herein. The Examiner states that "[i]n the instant case the capacitor as claimed does not require the etching step which forms the wafer layer." The Examiner appears to rely on MPEP § 806.05(f) to support the restriction requirement on the grounds "that the product as claimed can be made by another and materially different process."

The Examiner's position that the product can be made by another and materially different process is not feasible due to materials and physics restrictions defined by nature.

The technology of the present invention is not a macro level fabrication that involves stacking various materials, but is a microelectronics fabrication technology.

The capacitor as claimed requires an insulating material that serves as a form for defining a capacitor trench. The suggestion that the etching step is not required is not feasible as etching is required to form the capacitor trench. The insulating material is not preformed with naturally occurring capacitor trenches.

Etching is a microelectronics fabrication term that generically describes a variety of methods for creating physical features in semiconductors. These methods include, but are not limited to: chemical etching, reactive ion etching, dry plasma etching and ion milling. The creation of physical features in semiconductor processing requires that etch techniques be used. Without etching, the claimed capacitor cannot be fabricated. The elimination of etching would result in planar capacitor structures without the three-dimensional characteristics that make the claimed capacitor a significant new innovation in capacitor design.

It is not only the Applicant's position, but a physical reality that the capacitor as claimed <u>cannot</u> be made by another and materially different process. The Applicant has not been shown a viable alternative process, and this restriction requirement is improper.

Furthermore, the Manual of Patent Examining Procedure § 803.01 recites that "[i]f the search and examination of an entire application can be made without serious burden, the examiner must examine it on the merits, even though it includes claims to distinct or independent inventions." Process claims 13-25 and 39-54 track the fabrication of a product recited in the apparatus claims. The process claims are not directed to a distinct or independent invention and certainly do not represent a serious burden to examination.

Applicant, therefore, requests the Examiner to withdraw the restriction requirement.

Respectfully submitted,

John R. Thompso

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